

Virginia Electric and Power Company
North Anna Power Station
P. O. Box 402
Mineral, Virginia 23117

April 8, 1995

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

NAPS: MPW
Docket No. 50-338
License No. NPF-4

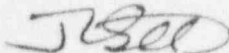
Dear Sirs:

Pursuant to North Anna Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to North Anna Unit 1.

Report No. 50-338/96-003-00

This Report has been reviewed by the Station Nuclear Safety and Operating Committee and will be forwarded to the Management Safety Review Committee for its review.

Very truly yours,



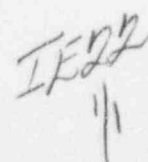
J. A. Stall
Station Manager

Enclosure:

cc: U.S. Nuclear Regulatory Commission
101 Marietta Street, N.W.
Suite 2900
Atlanta, Georgia 30323

R. D. McWhorter
NRC Senior Resident Inspector
North Anna Power Station

150017



LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HOURS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, DC 20503.

FACILITY NAME (1)

North Anna Power Station Unit 1

DOCKET NUMBER (2)

05000338

PAGE (3)

1 OF 3

TITLE (4)

MODE 3 ENTRY WITH INOPERABLE REDUNDANT HEAT TRACE CIRCUIT DUE TO PERSONNEL ERROR

EVENT DATE (5)

LER NUMBER (6)

REPORT DATE (7)

OTHER FACILITIES INVOLVED (8)

MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
03	14	96	96	003	00	04	08	96	FACILITY NAME	DOCKET NUMBER
										05000

OPERATING
MODE (9)

1

POWER
LEVEL (10)

75

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(B)
20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(C)
20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER
20.405(a)(1)(iii)	X 50.73(a)(2)(i)(B)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

(Specify in Abstract
below and in Text, NRC
Form 366A)

LICENSEE CONTACT FOR THIS LER (12)

NAME

Mr. J. A. Stall

TELEPHONE NUMBER (Include Area Code)

(540) 894-2101

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES

(If yes, completed EXPECTED SUBMISSION DATE)

X

NO

EXPECTED

SUBMISSION
DATE (15)

MONTH

DAY

YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On March 14, 1996, at approximately 2000 hours, with Unit 1 in Mode 1, (75 percent power), it was determined that Mode 3 was entered at 0511 hours on March 11, 1996, with the redundant boron injection flow path heat trace circuit inoperable. Both the normal and redundant circuits are required to be operable by Technical Specifications (TS) 3.5.4.2 in Modes 1, 2, or 3. Technical Specification 3.0.4 is applicable, where entry into an Operational Mode or other specified applicability condition shall not be made unless the conditions of the Limiting Conditions for Operations are met without reliance on provisions contained in the Action statement. This event is reportable pursuant to 10 CFR 50.73 (a)(2)(i)(B) for any operation or condition prohibited by TS 3.0.4.

The cause of the event has been determined to be personnel error. Tracking and review of the boron injection flow path heat trace circuit condition was inadequate.

This event posed no significant safety implications because the boron injection flow path temperatures were verified, once every six hours, to have been greater than the TS limit of 115 degrees Fahrenheit since entering Mode 3. Therefore, the health and safety of the public were not affected at any time during this event.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HOURS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
North Anna Power Station Unit 1		05000338	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
			96	003	00	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

1.0 Description of the Event

On March 14, 1996, at approximately 2000 hours, with Unit 1 in Mode 1, 75 percent power, it was determined that Mode 3 was entered at 0511 hours on March 11, 1996, with the redundant boron injection (EII System - CB) flow path heat trace (EII System - FE) circuit inoperable. Both the normal and redundant circuits are required to be operable by Technical Specifications (TS) 3.5.4.2 in Modes 1, 2, or 3. Technical Specification 3.0.4 is applicable, where entry into an Operational Mode or other specified applicability condition shall not be made unless the conditions of the Limiting Conditions for Operations are met without reliance on provisions contained in the Action statement.

During the Unit 1 refueling outage, with the unit defueled, it was noted that the heat trace circuit for the boron injection flow path was not maintaining temperature. On February 22, 1996, the low temperature alarm (EII Component - TA) locked in at 113 degrees Fahrenheit. The low temperature alarm is received at 132.5 degrees Fahrenheit. The redundant circuit was in operation at the time. The normal heat trace circuit was placed in service and the line temperature increased above the TS minimum temperature of 115 degrees Fahrenheit. The flow path temperature was verified to be above the TS minimum temperature once every six hours. A work request was initiated for the redundant circuit. A work order was subsequently entered in the work control system to check and/or repair the redundant circuit.

On March 11, 1996, Unit 1 entered Mode 3 at approximately 0511 hours with the redundant boron injection flow path heat trace circuit inoperable. On March 14, 1996, during the performance of heat trace functional testing it was noted that the redundant circuit for the boron injection flow path was still inoperable and the unit was in Mode 1.

2.0 Significant Safety Consequences and Implications

This event posed no significant safety implications because the boron injection flow path temperatures were verified, once every six hours, to have been greater than the TS limit of 115 degrees Fahrenheit since entering Mode 3. Therefore, the health and safety of the public were not affected at any time during this event.

These events are reportable pursuant to 10 CFR 50.73 (a) (2) (i) (B) for any operation or condition prohibited by TS 3.0.4.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HOURS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
North Anna Power Station Unit 1	05000338	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		96	003	00	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

3.0 Cause of the Event

The cause of the event has been determined to be personnel error. Tracking and review of the boron injection flow path heat trace circuit condition was inadequate. The boron injection flow path heat tracing is unique in that, it is the only borated water system that requires both the normal and redundant heat trace circuits to be operable at the same time while in Modes 1 - 3. However, the mark number descriptions associated with the heat trace circuits are similar to other heat tracing with no unique description. As such, reviews of equipment status failed to identify that the inoperable redundant heat trace was associated with the boron injection flow path and Mode 3 was entered.

4.0 Immediate Corrective Actions

The boron injection flow path temperatures were verified to have been greater than the TS limit of 115 degrees Fahrenheit since entering Mode 3. Entered action of TS 3.5.4.2 and continued to verify the normal circuit was maintaining the affected flow path temperature greater than 115 degrees Fahrenheit once every six hours.

5.0 Additional Corrective Actions

The redundant heat trace was replaced, tested and returned to service on March 15, 1996. A root cause evaluation is being performed on this event.

6.0 Actions to Prevent Recurrence

The mark number descriptions for the boron injection flow path heat tracing circuits and associated power supply equipment have been changed to include a unique identifier (i.e. TECH SPEC BIT). Any additional corrective actions will be implemented as necessary pending the results of the root cause evaluation.

7.0 Similar Events

None

8.0 Additional Information

During this period, Unit 2 was operating at 100% power and was not affected by this event.